

MESH WITH PROTECTION CHANNEL ACCESS (MPCA)

John C. Adler

ABSTRACT OF THE DISCLOSURE

5 A method for a communications network with a protect channel transmitting
protect channel data and working channel transmitting working channel data includes
transmitting the working channel data via the protect channel upon a disruption in the
working channel, and restoring the transmitting of protect channel data, wherein the
restoring includes applying a mesh restoration protocol to the communications
10 network to restore the transmittal of the protect channel data. The restoring includes
finding one or more alternate channels to transmit the protect channel data, the one or
more alternate channels including connected working and protect channels. An
apparatus disposed in a communication network having a protect channel and a
working channel includes a node controller, a route processor coupled to the node
15 controller, the route processor implementing a mesh restoration protocol, and a circuit
coupled to the node controller and the route processor, the circuit including a logic
gate for receiving signals identifying disruptions in transmissions in the protect
channel and the working channel and a switch responsive to the signals identifying
disruptions in transmissions in the protect channel and the working channel, the
20 switch communicating with the route processor to implement mesh restoration of
protect channel data. In one embodiment, the circuit is coupled to at least one line
card, the line card transmitting the signals identifying disruptions in transmissions in
the protect channel and the working channel. The circuit further includes an
input/output circuit for receiving instructions identifying criteria for applying mesh
25 restoration to protect channel data.